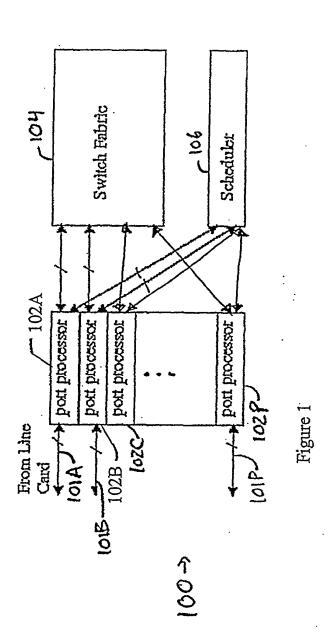
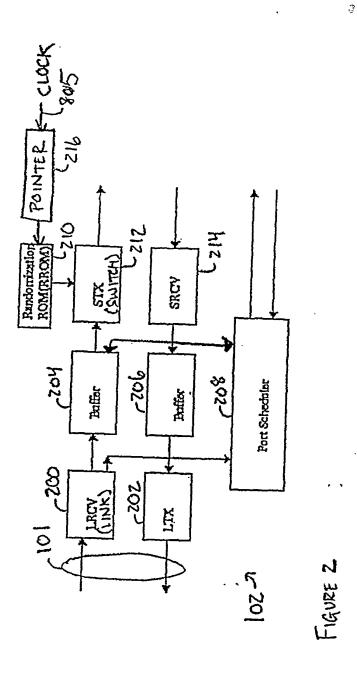
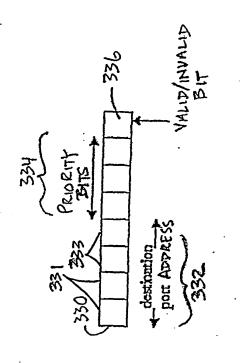
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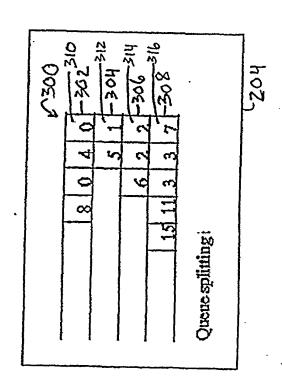
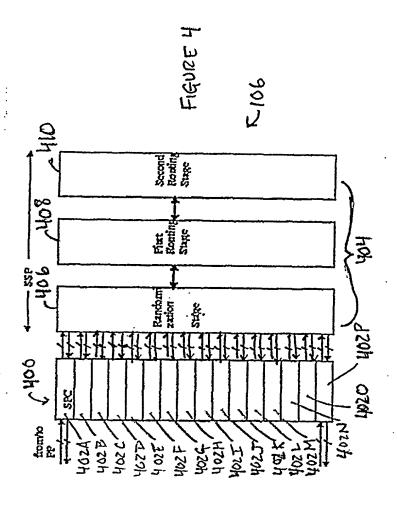


FIGURE 3,





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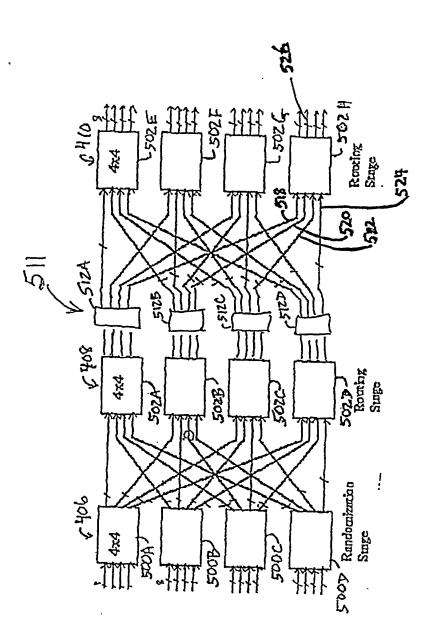
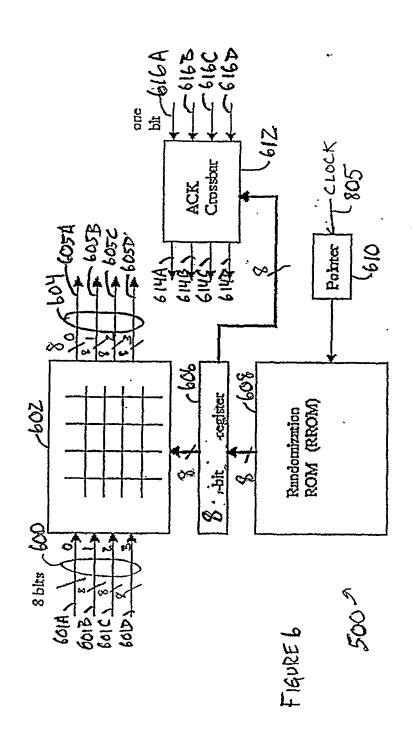
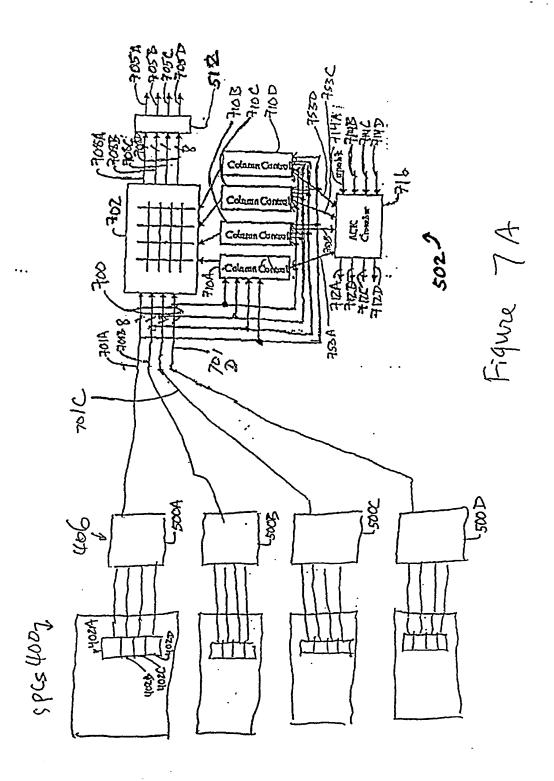


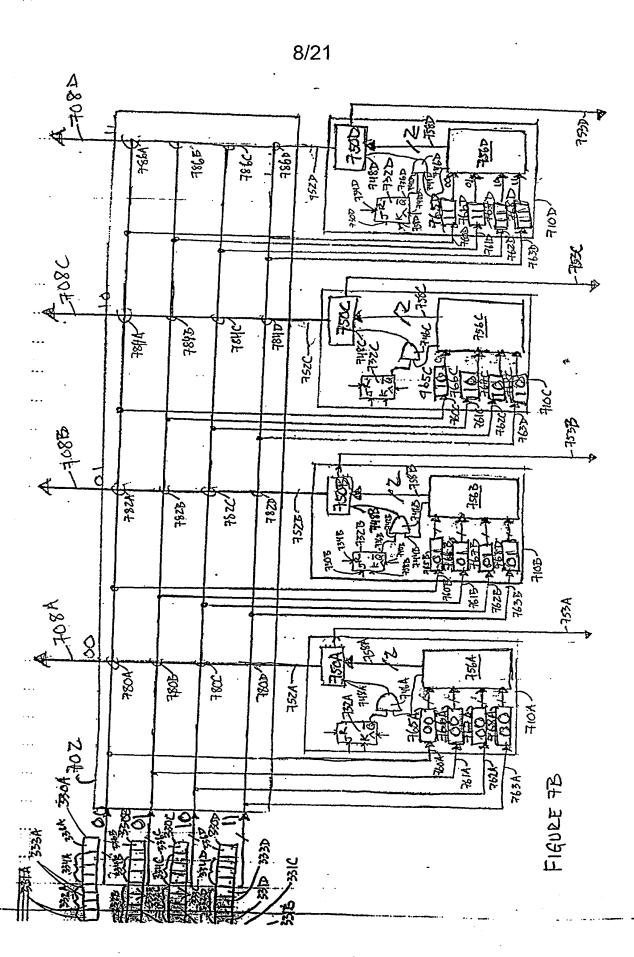
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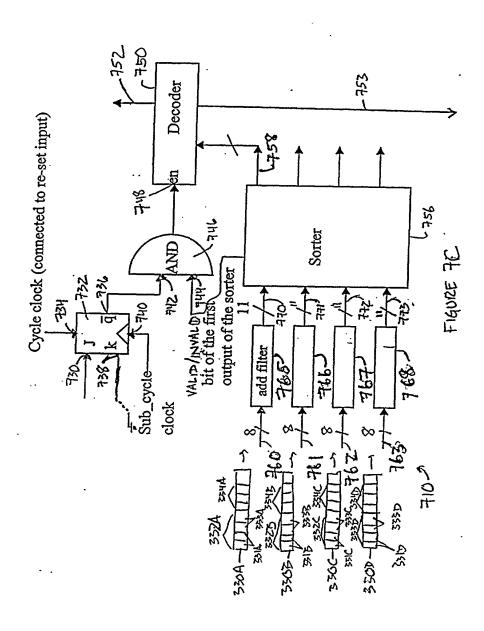


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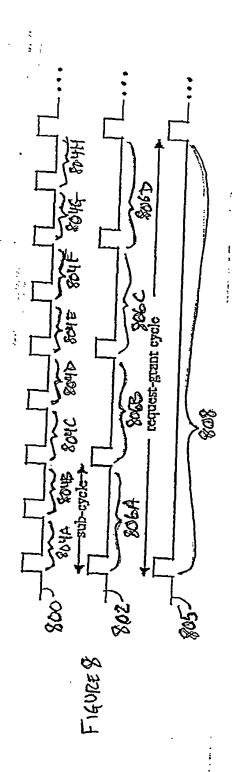


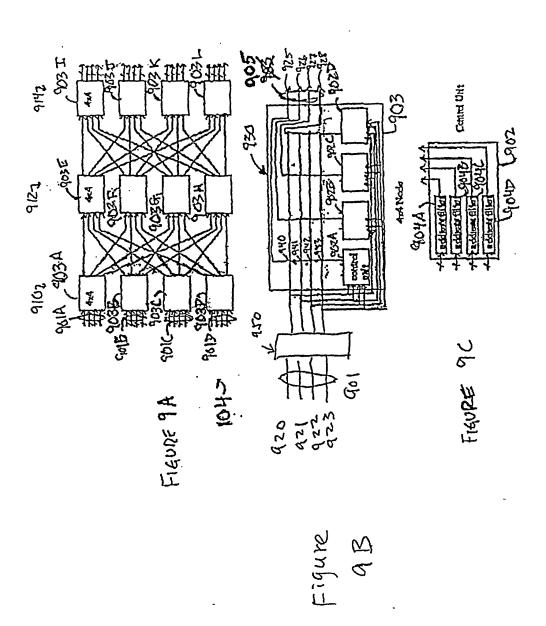


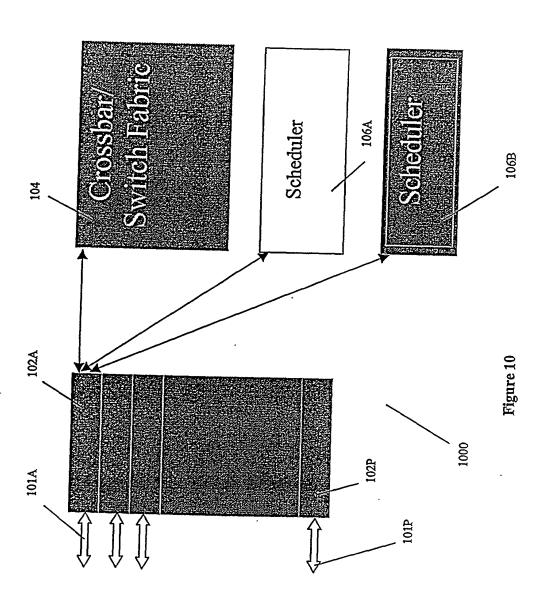
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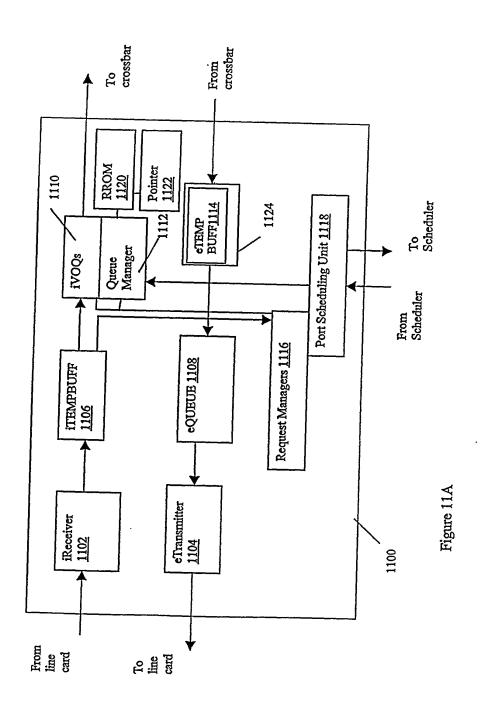
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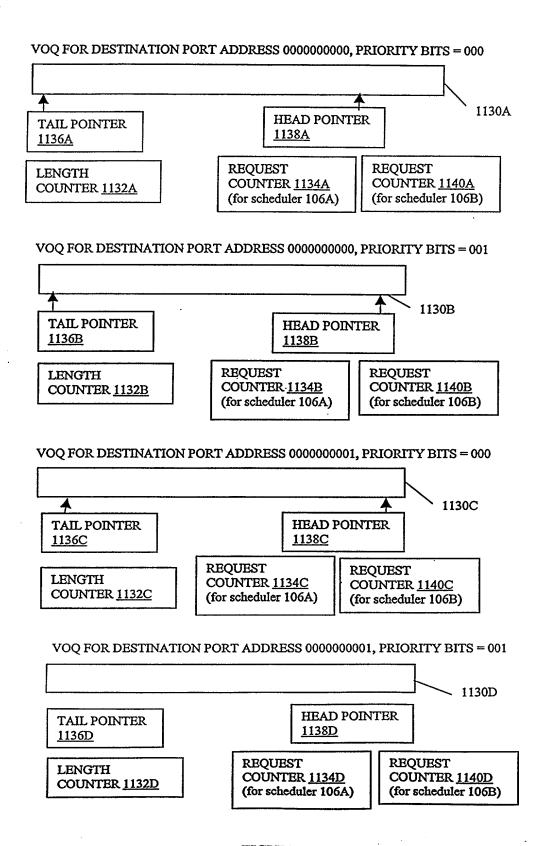


FIGURE 11B

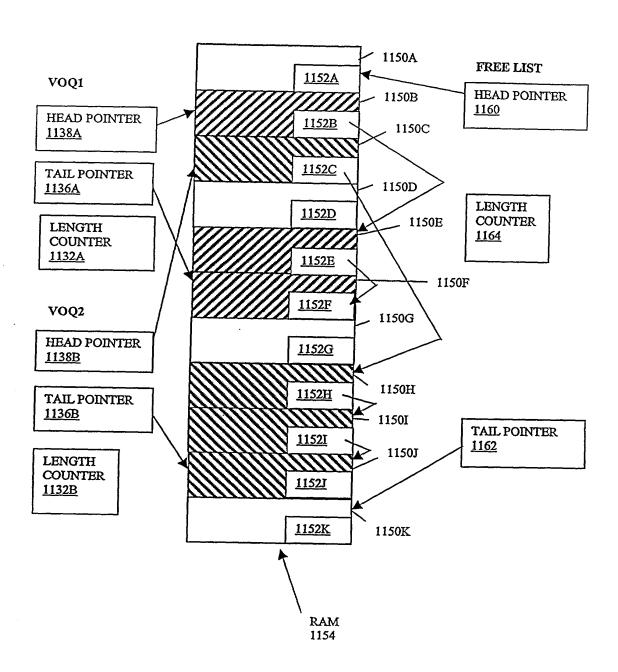


FIGURE 11C

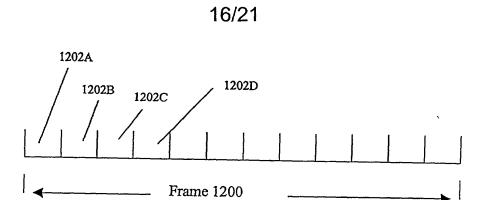


Figure 12

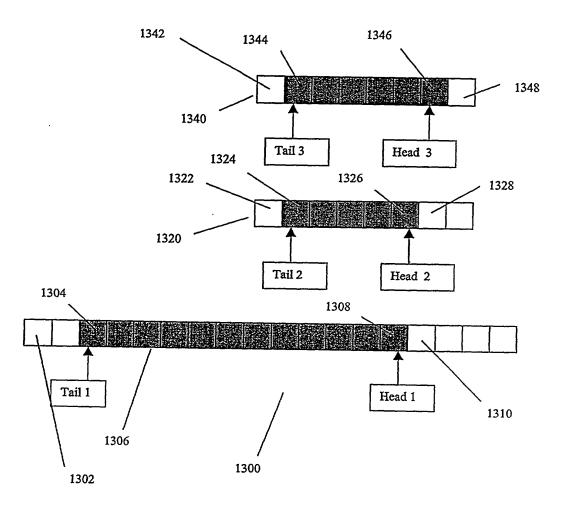


Figure 13

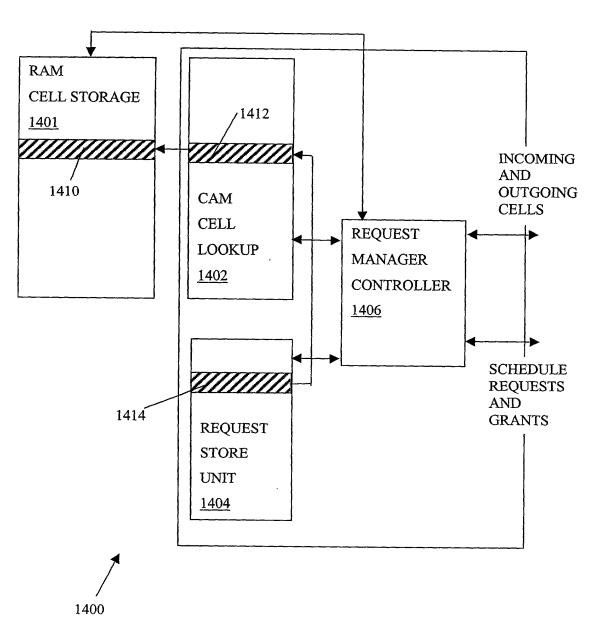


FIGURE 14

Cell Lookup CAM entry Format

| Bit[0] | Valid |
|--------------|---------------------|
| Bits[10:1] | Pointer |
| Bits[13:11] | Priority |
| Bits [24:14] | Destination Address |
| | |

Unicast Request Store Entry Format

| Valid |
|----------------------|
| Priority |
| Destination Address0 |
| Request Count |
| Head Pointer |
| Tail Pointer |
| Queue Over Limit |
| Flow Control |
| |

FIGURE 16A

| Bit[0] | Valid |
|-------------|----------------------|
| Bits[3:1] | Priority |
| Bits[15:4] | Destination Address0 |
| Bits[19:16] | Request Count |
| Bits[29:20] | Head Pointer |
| Bits[39:30] | Tail Pointer |
| Bit[40] | Flow Control |
| | |

FIGURE 16B

Multicast Request Store Entry Format

| Bit[0] | Valid |
|-------------|----------------------|
| Bits[3:1] | Priority |
| Bits[7:4] | Cell Requested |
| Bits[11:8] | Cell Sent |
| Bits[15:12] | Flow Control |
| Bits[25:16] | Cell Address |
| Bits[37:26] | Destination Address0 |
| Bit[49:38] | Destination Address1 |
| Bit[61:50] | Destination Address2 |
| Bit[73:62] | Destination Address3 |
| <u> </u> | |

RECEIVE UNICAST CELL; EXAMINE DESTINATION ADDRESS ~1800 AND PRIORITY LEVEL OF RECEIVED CELL LOCATE OR CREATE AN ENTRY IN THE UNICAST REQUEST STORE UNIT THAT HAS THE SAME DESTINATION ADDRESS 1802 AND PRIORITY LEVEL AS THE RECEIVED CELL LOCATE AN AVAILABLE ENTRY IN THE CAM; TRANSFER -1804 THE DESTINATION ADDRESS, PRIORITY LEVEL AND TAIL POINTER FROM THE REQUEST STORE ENTRY TO THE DESTINATION ADDRESS, PRIORITY LEVEL AND POINTER FIELDS OF THE LOCATED ENTRY IN THE CAM AND ASSERT THE VALID BIT OF THE CAM ENTRY WRITE THE RECEIVED CELL INTO A MEMORY LOCATION IN -1806 THE RAM THAT CORRESPONDS TO THE ADDRESS OF THE **NEW CAM ENTRY** INCREMENT THE TAIL POINTER OF THE ENTRY IN THE 1808 REQUEST STORE UNIT

RECEIVE A REQUEST GRANT FROM THE SCHEDULER; FIND AN ENTRY IN THE REQUEST STORE UNIT WITH A DESTINATION ADDRESS AND PRIORITY LEVEL THAT MATCH THE DESTINATION ADDRESS AND PRIORITY LEVEL OF THE REQUEST GRANT

1900

SEND THE DESTINATION ADDRESS, PRIORITY LEVEL AND HEAD POINTER OF THE FOUND ENTRY IN THE REQUEST STORE UNIT TO THE CAM OR CONTROL LOGIC COUPLED TO THE CAM; FIND AN ENTRY IN THE CAM WITH A DESTINATION ADDRESS, PRIORITY LEVEL AND POINTER VALUE THAT MATCH THE DESTINATION ADDRESS, PRIORITY LEVEL AND HEAD POINTER VALUE OF THE FOUND ENTRY IN THE REQUEST STORE UNIT

1902

OUTPUT AN ADDRESS OF THE CAM ENTRY WITH A
DESTINATION ADDRESS, PRIORITY LEVEL AND POINTER
VALUE THAT MATCH THE DESTINATION ADDRESS, PRIORITY
LEVEL AND HEAD POINTER VALUE OF THE ENTRY IN THE
REQUEST STORE UNIT; USE THE ADDRESS OF THE CAM
ENTRY TO RETRIEVE A CELL STORED IN A MEMORY
LOCATION OF THE RAM WITH THE SAME ADDRESS

1904

SEND THE RETRIEVED CELL TO THE SWITCH FABRIC FOR SWITCHING; INCREMENT THE HEAD POINTER OF THE REQUEST STORE UNIT ENTRY; IF THE VOQ IS NOW EMPTY, INVALIDATE THE REQUEST STORE UNIT ENTRY; IF THE VOQ IS NOT EMPTY, DECREMENT THE REQUEST COUNT FIELD IN THE REQUEST STORE UNIT ENTRY; INVALIDATE CAM ENTRY

-1906